

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1, and 5-9 are currently pending. Claims 1, 8 and 9 are independent and are hereby amended. No new matter has been introduced. Support for this amendment is provided throughout the Specification as originally filed.

Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II. REJECTIONS UNDER 35 U.S.C. §112

Claims 1, and 5-9 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The Office Action asserts, there is no support for the claim limitation “that a first candidate words have a number of phonemes equal to or above the preset number of phoneme values.” OA at page 4, par. 5.

Applicants respectfully disagree.

As a preliminary matter, Applicants note for accuracy the actual disputed limitation as recited in the claims is, “. . . candidate first words . . . have a number of phonemes equal to or above the preset value . . .”

Applicants contend support is found in the as-filed specification as follows (references being provided to paragraphs in the present Published Application No. 2002/0173958):

Page 35, last paragraph, Publ. App. par. [0102]:

"That is, the word pre-selection unit 13 selects those words registered in the dictionary database 18A and which are generally shorter in enunciation time, such as the words the number of phonemes and syllables of which are less than a pre-set value, for example, prepositions or articles in English and adjuvants or adjuvant-verbs in Japanese, without regard to the acoustic scores thereof, to send the selected words to the matching unit 14."

Page 53, second paragraph, Publ. App. par. [0150]:

"In the word pre-selection unit 13, the specified words selected on the basis of the number of phonemes or parts of speech can be registered in a word dictionary, apart from the other words."

Claim 2 (now canceled):

"... wherein said selection means selects, as said second words, the words having the number of phonemes satisfying a pre-set condition, with the number of phonemes as said second measure."

These paragraphs indicate that having a number of phonemes below a preset value is a selection criterion. As pointed out in the Office Action there is ample support for "first candidate words having a larger number of phonemes" than the candidate second words. Because "the candidate second words having unstable acoustic characteristic values with a number of phonemes less than a preset value" (claim 1), the candidate first words "having a larger number of phonemes" (application par. 42), it is inherent "the candidate first words . . . have a number of phonemes equal to or above the preset value . . ." as recited in claim 1.

III. REJECTIONS UNDER 35 U.S.C. §103

Claims 1-2 and 7-8 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,218,668 to Higgins et al. (hereinafter merely “Higgins”) in view of Doyle (*“Progressive Word Hypothesis Reduction for Very Large Vocabulary Continuous Speech Recognition,” 1997*); and

Claims 5 and 6 were rejected under 35 U.S.C. §103 as allegedly unpatentable over Higgins and Doyle and further in view of U.S. Patent No. 5,960,447 to Holt et al. (hereinafter merely “Holt”).

Applicants respectfully traverse this rejection.

Independent claim 1 is representative and recites, *inter alia*:

“... selecting one or more candidate first words ... based on a word score that represents an evaluation of acoustic scores and language scores ... and for selecting one or more candidate second words ... not based on the acoustic score, the candidate second words having unstable acoustic characteristic values with a number of phonemes and syllables less than a preset value;

wherein the selected one or more candidate first words based on the word score have a number of phonemes and syllables equal to or above the preset value and more stable acoustic characteristic values than the selected one or more candidate second words”

Claim 1 describes the second candidate words are words having a small number of phonemes and syllables below a preset value and unstable acoustic characteristic values are necessarily processed for matching. The candidate first words are words having a larger number of phonemes and syllables equal to or above the preset value and hence more stable

acoustic characteristic values are selected based on the word score including the acoustic score.

Publ. app. par. [0102].

Thus, in the word pre-selection unit, no failure of selection of correct words occurs even when a simpler acoustic model or grammatical rules are used, as a result of which the precision in speech recognition can be improved at the same time as the resource required for processing in the word pre-selection unit is diminished.

If the words selected in the word pre-selection unit based on the word score including the acoustic score are only the words of a larger number of phonemes with relatively stable acoustic characteristic values, no failure in selection of correct words occurs even when the number of words selected based on the acoustic and language scores is diminished, as a result of which the accuracy in the speech recognition can be improved at the same time as the resource necessary for processing in a subsequent matching unit is diminished. Publ. App. pars. [0118]-[0121].

The Office Action points to Doyle for the above-recited feature of claim 1. However, claim 1 has been amended to avoid the Doyle reference. Doyle does not describe the candidate second words as having a number of phonemes and syllables below a preset number. Moreover, Doyle does not describe the candidate first words as having a number of phonemes and syllables equal to or above a preset number. Indeed, while Doyle discusses “boosting” “the score for the most frequent sort words . . . according to the equation; there is no discussion of a preset number of phonemes and syllables for all candidate second words as recited in claim 1.

Neither Higgins nor Holt add the elements missing from Doyle as discussed above.

For reasons similar or somewhat similar to those described above with regard to independent claim 1, independent claims 8 and 9 are also believed to be patentable.

IV. DEPENDENT CLAIMS

The other claims are dependent from one of the claims discussed above and are therefore believed patentable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Claims 1, and 5-9 are in condition for allowance. In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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A handwritten signature in black ink, appearing to be 'P. Levy', written over a horizontal line.

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